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PATENT ABSTRACTS OF JAPAN

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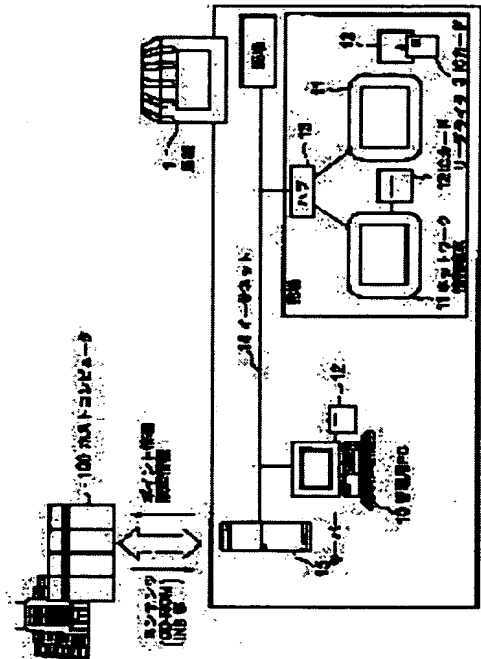
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(54) CUSTOMER RELATIONSHIP SYSTEM UTILIZING IC CARD AND IC CARD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a customer relationship system for constructing and managing the relationship between a customer and a shop and an IC card to be used for that system.

SOLUTION: This system is for constructing and managing the mutual relationship between the customer and the shop with the IC card carried by the customer, a network information terminal and an IC card reader/writer installed in the shop and, on the side of customer, attribute information is read by inserting an IC card 3 on which customer's own attribute information is recorded into an IC card reader/writer 12 in the shop. Thus, information on customer's own concern can be grasped from a network information terminal 11 and, on the side of shop, action information on that customer can be grasped from the operation history of the network information terminal. This IC card is to be used for such a system and in its data area, the attribute information, transaction information and action information of the customer are recorded at least.



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CLAIMS

[Claim(s)]

[Claim 1] By the IC card which a customer carries, and the network information terminal and IC card reader/writer with which the store was equipped, by being a system for carrying out construction management of the mutual production of a relation in a store with a customer, and a customer side's inserting in IC card reader/writer of a store the IC card on which the attribute information of self was recorded, and making attribute information read. While being able to grasp the information about self concerns from the network information terminal concerned, a store side is a customer relation cypridium system using the IC card characterized by the ability to grasp the action information about the customer concerned from the operation history of a network information terminal.

[Claim 2] The customer relation cypridium system which used for the store side the IC card according to claim 1, characterized by having the administrative personal computer further.

[Claim 3] The customer relation cypridium system using the claim 1, characterized by the network information terminal by the side of a store having connected with the host computer which generalizes the store set group of a specific area, and the IC card according to claim 2.

[Claim 4] The customer relation cypridium system which used the IC card according to claim 3 from the claim 1, characterized by preparing the data area on which attribute information, dealings information, and action information are recorded at least in the IC card which a customer carries.

[Claim 5] The customer relation cypridium system which used the IC card according to claim 3 from the claim 1, characterized by including the personal goods information based on the attribute information acquired from the IC card which a customer carries at least in the information with which a store side provides a customer.

[Claim 6] The IC card which is an IC card for using it for a customer relation cypridium system according to claim 1, and is characterized by recording a customer's attribute information, dealings information, and action information on a data area at least.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] A contact with a customer is used at the sales site of the various stores and department store to generate [most], a restaurant, etc., and the system and IC card concerning this invention are related with the IC card used for the system and it which serve as customer relation cypripedium and effective structure of management (construction management of the production of a relation of the store and customer who are a feeder).

[0002]

[Description of the Prior Art] The system which receives a customer's attribute information by issue of a member's card, grasps intention information by CS (Customer Satisfaction) questionnaire, carries out collection analysis of the purchase information by point service, and carries out customer approach by direct mail (DM), telephone, etc. already exists. However, there are the following problems in these.

** Although the 1st coming to the store is carried out, purchase has the problem from which action information is not acquired, when not carrying out. Action information is actions other than a customer's purchase, and coming to the store, an inquiry, a claim, etc. are said. Although these are important customer information, they are not collected as information.

** Although the store etc. is provided with the result which analyzed a questionnaire and the information on point service by the document etc. again, in a sales site, there is a problem that it cannot use for timely customer approach that it is hard to use.

** Although customer data are recorded on the terminal or the headquarters side system, when multi-store expansion is being carried out and the customer of other stores comes, in order service is impossible or to give one's service, there is a problem for which real time network connection with headquarters is needed. That is, use of a computer is required also in sales sites, such as a general store, usually, it is hard to use for treatment, being unfamiliar to it, and there is a problem which is insufficient of timely customer approach structure.

** Although the information terminal which a customer operates by uninhabited is installed as an information offer terminal to a customer, it has not aimed at collection of action information for the purpose of only information offer. And there is a problem that the information to offer is restricted to the uniform menu.

** Information was not memorized by the card but, generally is memorized only to the terminal side. Even when having memorized on the card like an IC card, it is attribute information and dealings information and action information is not memorized.

[0003] On the other hand, with a tradename with a "network display" or the "interchange gate", a display, a touch panel, and the display terminal that unified the main part function (browser ability and network function) can be developed (the SEIKO EPSON incorporated company make), and, unlike conventional personal computer equipment, an unfamiliar person can use an information terminal now for a computer easily recently. The display concerned has the function which can peruse Web data only by touching a screen by touch-panel adoption. (In the following and a claim, such a display is carried out to a "network information terminal".) However, in the

field of this invention system, in spite of developing such a network information terminal, since it is not used effectively, a good customer relationship management system with a customer and management were not built, but a problem like the above-mentioned ** - ** has twisted that it is unsolved

[0004]

[Problem(s) to be Solved by the Invention] Then, this invention tends to build the system which can solve the above technical problems and which plots, namely, grasps action information other than a customer's attribute information, intention information, and dealings information. If it puts in another way, you are going to make it shift to the marketing process by experience before purchase from the service process by the conventional experience after purchase. Next, it is in providing a customer's truth with the information which is concerns using the above-mentioned network information terminal. Drawing 1, although it was the purpose of only offering the thing of the content which turned, the information which *(ed) to a customer's attribute, or dealings and action information tends to be analyzed, and it is going to provide real time with the conventional information terminal. furthermore, the system which the IC card distributed to a customer is made to memorize customer data, and installs them in a store in order to raise convenience for the purpose of the system which the man of a general store without the knowledge of a computer can employ — the above — the new network information terminal should be used

[0005]

[Means for Solving the Problem] The 1st of the summary of this invention for solving the above-mentioned technical problem By the IC card which a customer carries, and the network information terminal and IC card reader writer with which the store was equipped By being a system for carrying out construction management of the mutual production of a relation in a store with a customer, and a customer side's inserting in IC card reader writer of a store the IC card on which the attribute information of self was recorded, and making attribute information read While being able to grasp the information about self concerns from the network information terminal concerned A store side is in the customer relationship management system using the IC card characterized by the ability to grasp the action information about the customer concerned from the operation history of a network information terminal. Since it is this system, construction management of the production of a good relation with a customer can be carried out.

[0006] The 2nd of the summary of this invention for solving the above-mentioned technical problem is an IC card for using it for the above-mentioned customer relationship management system, and is in the IC card characterized by recording a customer's attribute information, dealings information, and action information on a data area at least. Since it is this IC card, it can use for construction management of the production of a good relation with a customer.

[0007]

[Embodiments of the Invention] Before explaining this structure of a system, in order to grasp the concept, suppose that each function in which this invention system possesses is explained. Drawing 1 is drawing explaining the function and its practical use field of a system of this invention. IC card reader writer and 13 show the hub, and, as for the inside of drawing 1 , and 11, a network information terminal and 12 show Ethernet (registered trademark), as for 14. The customer who uses the information terminal 11 will insert and use self IC card 3 for IC card reader writer 12. this invention system tends to attain the purpose by dividing roughly and using six functions. with the six functions, it (6)-selling-support-functions [(1) goods information offer function, (2) point functions, (3) game functions, (4) navigation functions, the information function from (5) shops (store), and], and comes out Hereafter, the each function and example of practical use are enumerated and explained.

[0008] (1) There are a goods information offer function, goods information common to a customer as the example goods information of practical use, and personal goods information. The content is as follows.

<new goods information> ** [which introduces — common goods information offer —** goods information using a still picture and an animation] by the material of <goods information> ** goods which introduces the information on the goods currently dealt with using a still picture Introduce how to take the method of handling [goods], for example, wash and a wrinkling, how

to treat, etc. using a still picture and an animation. The goods currently <handling information [classified by goods]> ** Dealt with are searched with according to an item, a color, and size etc. The order of the goods which are not in <reference goods information> ** stock, and for other goods which displays goods information, Display the purchase history recorded on the IC card of the <reservation application of goods> — personal goods information offer — ** customer who proposes. The occupation of the attribute information which entered at the time of a <purchase history display> ** membership card application, and was recorded on the IC card to origin. It enters at the time of the <male smear ITEMU display classified by occupation> ** membership card application which displays the recommended article to the customer concerned. Based on the age of the attribute information recorded on the IC card, display the recommended article to the customer concerned. It enters at the time of a <male smear ITEMU display classified by age> ** membership card application, and there is <a male smear ITEMU display classified by personal color> etc. which displays the recommended article to the customer concerned based on the favorite color currently recorded on the IC card.

[0009] (2) By inserting in a reader/writer the <coming-to-the-store point grant> ** IC card which gives one point per to a customer's IC card day whenever it inserts a point function and its example of practical use ** IC card in a reader/writer. Introduce the information on the present which can be exchanged when the point more than <point reference> ** fixed is saved by the picture. [which displays the present point size] After displaying the contents of a <contents display of present> ** present, there is <point exchange> etc. exchanged for the point by choosing the picture of goods to exchange.

[0010] (3) When a game function and its example of practical use ** customer have you reply to the <sense-amplifier quiz> ** questionnaire which can increase the point held by carrying out a terminal and a game, there is <a lucky item display classified by constellation> etc. which displays an item with the constellation of the <CS questionnaire function> ** customer who gives one point.

[0011] (4) There is <selection information of the last perusal information> which can provide a customer with a continuation of perusal last time by recording the log of the contents which the customer perused on the IC card, and displaying a minute on a screen several [past] times a navigation function and last time [its / example of practical use **].

[0012] (5) the information function from a shop (store), and example of practical use ** — there are <an opinion, a comment input>, etc. from a visitor which receives the information from the guidance of bargain information and the <receptionist> ** customer who offer the <store information-display> ** bargain information besides < which offers the information on a store besides store information-display > ** that the information on the store concerned is offered

[0013] (6) Display information that the information of the customer under surveillance of a network information terminal is another on the screen of an administrative personal computer as contents for a selling support function and its example of practical use ** salesclerks. It is not the <visitor information display> which becomes possible [that this provides a salesclerk with the data which should be offered to a customer], and since it is not displayed for salesclerks on a network information terminal, these contents are deleted from drawing 1 .

** When a customer inserted an IC card in a reader writer, the <message functional information classified by customer>, for example, a "Hanamoto O child, which displays the message for every customer inputted beforehand, and size curing of the skirt of the trousers of an order were completed. Please speak to a salesclerk. " " How are the goods which it kept in a lack last time? . Even a salesclerk needs to speak. It is " etc.

[0014] Next, the concrete composition of this invention system is explained. Drawing 2 is drawing explaining the system configuration of this invention. Like drawing 2 , by installing in a general store and installing in two or more stores of a specific area, the system of this invention tends to aim at an improvement of communication with a customer, and tends to carry out construction management of the customer relation cypridium. Although a meaning with a specific geographical area is also included, as long as it is connectable in a network, the inside of a specific area can be considered. Although especially the target number of shops is not restricted, management is easy if it is about 40 stores from not making amount of information

excessive or the purpose for a specific area. Moreover, it is desirable that they are goods of the same kind in the ability to do and the dealer of service. Therefore, it can be preferably used among sequence stores, such as a boutique which carries out multi-store expansion, a spectacles store, a family restaurant which the latency time generates, and a car accessory shop, etc.

[0015] Although it therefore differs also in the scale in each counter and service counter of each store 1, about about ten network information terminals 11 to which IC card reader/writer 12 was attached are installed from several sets. Each network information terminal 11 is connected to a server 15 through a hub (line concentrator linked to a radial) 13 with Ethernet (on the other hand formula [Ethernet(registered trademark); bus type LAN]) 14, and data delivery with the host computer 100 which generalizes the store set group of a specific area further is performed. 10BASE-T is preferably used for the cable of Ethernet, and data delivery with a host computer 100 is performed by an archive medium or on-line batch processing, such as CD-ROM. It is desirable that administrative [PC / 10] (personal computer) is further installed in each store, and when a customer uses an IC card and you want to know the content of a customer's attribute information or the screen in view ** by the store side, it can use administrative [this / PC]. Moreover, IC card reader/writer 12 is attached to administrative [PC / 10], and it can be used for issue of a member card etc.

[0016] The network information terminal 11 is a Web (World Wide Web) perusal terminal which unified main part functions, such as a display, a touch panel, a browser, and a network function, and as mentioned above, since it is a compact design, it can be used, being able to hang, or it can be used for a wall on a table side, placing it. Moreover, though it is compact specification, animation video etc. can be used with a high-speed graphic or a sound function, and pleasure can be directed. As a feature on operation, by touch-panel adoption of an analog resistance film method, a Web screen can be perused only by touching a screen, and easy operability can be realized. Moreover, since it does not have a hard disk leading to failure but browser software is also downloaded from a server 15, the maintenance of a system becomes only a server side, it is wide opened from complicatedness, and the possibility of a trouble is mitigated sharply.

[0017] Such a network information terminal can realize the rich display force by carrying a color display and a high-speed graphic chip. Moreover, since HTML contents are used as the base, creation of contents is easy. An animation is also reproducible with data, such as an audio video, and commercials can be passed while not using the terminal. Furthermore, pleasant production is made using a quality sound and a variety of game can also be carried out by the animation function.

[0018] Such a network information terminal 11 is installed in every place of each counter in a store so that a customer can access freely. When a customer uses the network information terminal 11, it is necessary to insert in a reader/writer IC card 3 which is a member card. About IC card 3, although mentioned later, the data area which records dealings information and action information, such as a data area on which attribute information, such as a member number and a member name, is recorded, a purchase day, and purchase items, is prepared. IC card reader/writer 12 has the function to write information in an IC card through the end-connection child of an IC card, and to read information.

[0019] As data recorded on IC card 3 which is a customer's member card on the other hand (1) ** member number, ** member name, ** address, ** telephone number, ** birth date, ** sex, ** occupation, ** hobby, etc. occur as member attribute information data. as (2) member action information data ** There are a coming-to-the-store date, ** point, a ** reference history (histories, such as a reference day and a terminal screen number for which it referred), a ** game history, etc.

(3) As member intention information data, there are ** intention information, a **CS questionnaire result, etc.

(4) As member dealings information, there is ** dealings information (a purchase day, purchase items, amount of money), and there are a store code for **, ** person-in-charge code, ** lottery date, a ** lottery result, etc. as (5) store information. As memory space of the IC card which records these, since 130 bytes of data area and about 254 bytes of use field are

[minimum] necessary, about 1024 bytes is preferably needed.

[0020] If IC card 3 is inserted in IC card reader/writer 12 of the network information terminal 11 which the customer came to the store and was installed in the counter, the customer information memorized by the IC card is displayed in an instant on the administrative personal computer 10 in a store counter side, or a server 15, and customer information can be grasped on real time in a store side. Moreover, the customer attribute information data and the operation information in an IC card are memorized to a server, and the operation result of a terminal can output the customer analysis data of the day on the basis of the customer's attribute information (sex, age, etc.). Moreover, effect analysis of the event can grasp within the day by combining with event information (an event, contest, etc.). Furthermore, by transmitting the data memorized to the server to the host computer 100 of headquarters, data can be passed to the database marketing system of a high order, and it can utilize as time series analysis or all store analytical data. The analysis result can be transmitted to the server of a store, and it can also utilize. Moreover, since all customer data are memorized to the IC card, also in a store besides a sequence, the same service can receive a customer.

[0021] Next, the example of the usage of the system of this invention is explained. Drawing in which drawing 3 shows the screen flow of a network information terminal, drawing 4 - drawing 6 are drawings explaining the example of the screen display of a system utilization time. Like drawing 3, at the time on a drawing features, if the customer as whom the commercials by the screen saver or the animation are displayed (P1) inserts IC card 3 in the reader/writer 12, a menu screen will be displayed (P2). When carrying out point grant to this operation of a customer, the coming-to-the-store point is given, and the content is displayed, when it searches from a customer's attribute information and there is a message to the customer concerned. A menu screen For example, (A) goods information, (B) personal information, (C) point information, (D) It can consider as shopping information and the information on (E) and others. For example, if a customer chooses the menu of (A) goods information, the selection screen of goods information will be displayed (P3), and if the menu of (B) personal goods information is chosen, the goods information suitable for customer's individual's taste will be displayed (P4). The same is said of the case of other menu selection (P5, P6, P7), and in selection of the (F) end, an IC card is discharged and it ends.

[0022] Based on each screen, it explains below. each of these is examples and it can change into the favorite content — obvious — it is. When a customer approaches a network information terminal, the screen saver is working to (1) terminal, or the commercials by the animation are displayed on it (drawing 4 (A)).

(2) If a customer inserts IC card 3 in IC card reader/writer 12, the customer information memorized in relation to the customer concerned will be expressed in administrative [by the side of the counter of ** store / PC / 10], or server 15 screen as real time. Since the access data concerned are memorized serially, reference reference of them can also be carried out later. On the other hand, a customer's name, the accumulating-totals coming-to-the-store point, and virtual-online-shop information are displayed on ** network information terminal 11 (drawing 4 (B)). A network information terminal is indicated a short time for about several seconds, and it changes to a game selection screen automatically (drawing 4 (C)).

[0023] (3) When a customer chooses "it carries out" for a game, change to a game screen. When "it does not carry out" is chosen for a game, the coming-to-the-store point 1 is added, and it changes to another menu selection screen (drawing 4 (D)). On this screen, a button indication which can perform selection of ** (common) goods information, ** personal (goods) information, ** point exchange, ** shopping information, other information [**,], ** message message, and ** end button ** is given. In addition, when ** and other information are chosen, the lucky item display classified by a bargain information screen and constellation etc. can be chosen.

[0024] (4) The screen which can reservation-propose [of new goods information, goods information (according to individual) the handling information classified by goods, and goods], and can ** is expressed as a common goods information screen as mentioned above. Based on the attribute information exception on ** IC card, a goods screen required for a customer is expressed as a personal goods information screen one by one. Personal goods information

information displays the goods in which a customer is likely to get interested and occupation exception, an age exception, according to a personal color, etc. beforehand.

[0025] (5) When a customer chooses "it carries out" for a game, change to a game screen. The next game screen — ** game start message and ** game start — it is **-accumulating-totals-point-displayed, and **, a screen changes automatically in order of **->**->**, and a game begins. After a game is completed, it changes to a point exchange screen (drawing 5 (A)).

[0026] (6) The content of a present and the accumulating-totals point are displayed on a point exchange screen (drawing 5 (B)). If the content of a present is chosen, a present tradename and the required point will be displayed, and if goods are chosen, it will become the screen of mailing-address guidance.

[0027] (7) On the screen of mailing-address guidance, when the mailing address of a customer's address is displayed from the attribute information on an IC card and it chooses other mailing addresses, a keyboard will be displayed and a character input will be performed from a touch panel. If a mailing address is determined, a mailing-address confirmation button will be pushed (drawing 5 (C)).

[0028] (8) On the screen of bargain information, the bargain information under operation and the bargain information on one of these days operation schedule are expressed as the other stores in a store. After bargain information is displayed, a screen change indication of a game screen selection button etc. is given (drawing 6 (A)).

(9) Display that a customer's fortune-telling chooses today's fortune-telling screen with a birth date, a constellation, etc. After a fortune-telling screen is displayed, a screen change indication of a game screen selection button etc. is given (drawing 6 (B)).

[0029] The data which the customer operated on each above-mentioned screen can be memorized to an administrative PC side, and can perform the behavior analysis of the customer of the day by using the member number of the raw data etc. as a key, and serial detailed analysis and all store analysis of them are attained by transmitting the stored data concerned to host system (for example, host computer 100). Since a customer takes care not to **** bored, when the customer has not operated the information terminal on the basis of HTML contents with easy creation or renewal of contents, animations, such as commercials, can be passed and a game can also be enjoyed by the animation function. In order to promote a customer's terminal handling, by being able to carry out structure, such as carrying out double precision of the coming-to-the-store point by addition and the game result of the coming-to-the-store point, and memorizing the history of a terminal handling on a card, the menu screen which met a customer's taste with the data can be created on real time, and a message peculiar to the customer concerned can be displayed.

[0030] A system configuration is considered as the terminal (even if it power-supply-turns on and being turned off, data storage does not have data corruption, in order not to carry out) composition which displays the server (possible also on notebook computer level) by which WindowsNT was carried, and HTML contents by the browser. It is only the result of the HTML contents he can do exchange simply even if data break to a server, goods data, and its day, and it does not have the customer database which is not easy to change, but all customer data are structure which it has in an IC card.

[0031] Drawing 7 is drawing showing the example of a screen displayed on the network information terminal at the time of customer coming to the store. It is the example as which the screen corresponding to drawing 4 (D) was displayed. If a customer inserts in the reader/writer 12 IC card 3 which is a member card, while a customer name will be displayed on 11d of display screens of a terminal, the coming-to-the-store point is added and the present sum total point mark are displayed. Furthermore, goods information (common goods information), personal goods information, point exchange, the information on other, and the selection button are displayed. Moreover, the button and end button which choose a message message are displayed.

[0032] Drawing 8 is drawing showing the example of a screen displayed on a network information terminal, when a customer chooses personal goods information. On the screen of personal goods information, a screen display of the newest goods information about the woman in the first half of the 20th generation is carried out as an item according to age like drawing 8. The message

message button is displayed on the screen lower part of a network information terminal. When choosing a message button, the message prepared to the specific customer above beforehand is displayed.

[0033]

[Example] The system of the above-mentioned operation gestalt (Example) As a network information terminal INTERGATE "model ND-2000" (the SEIKO EPSON incorporated company make) is used. ("IC card R/W OMRON V4BF-2J-03V" by OMRON Corp.) is connected to the terminal concerned as an IC card reader writer. When the contact smart card (prototype; 1024 bytes) with which the data area on which a user's attribute information and dealings information are recorded on a customer, and action information is recorded was prepared was made to carry and having been experimented in it, functioning on fitness was checked.

[0034] As mentioned above, according to the system of this invention, a window-shopping customer's coming-to-the-store information which is not purchased by adding ** coming-to-the-store point can be collected, and the information on the degree of loyalty and behavior patterns to a store (a rest, a coming-to-the-store cycle, etc. of a company) can come to hand. Moreover, at the time of ** coming-to-the-store point, motivation can be raised by results, such as a game, with the mechanism which carries out the double point. ** By holding information (newest trend information, travel information, etc.) reference of the newest goods information or its related information at a terminal, and memorizing the operation history to an IC card, display the screen customized for every customer at the time of operation, and the personal approach and terminal-handling convenience to a customer by information offer and the individual message which suited taste become possible next time at it. Thereby, terminal-handling frequency can be raised and an operation history can come to hand as action information. ** By making the structure which can perform reference of goods (a color, size) which has not carried out shop front exhibition, correspondences to customer needs including goods without the actual thing can be performed, and needs can also be collected.

[0035] Furthermore, the system of this invention can be easily done also in after linkage with the dealings information gathering system by the POS register building. That is, grasp of personal approach also including the dealings information on a store and a customer can be performed by writing the dealings information inputted by the POS register by ** point system etc. in an IC card. ** It can also cooperate with an alien system by sharing the storage area in an IC card.

[0036]

[Effect of the Invention] As mentioned above, it comes to be able to perform collection of action information in case the conventional purchase information or not the intention information at the time of CS activity but a customer does not purchase like a detailed explanation according to the system of this invention. Moreover, information required at a store and information required in headquarters can be divided, and it can consider as effectively utilizable structure. Therefore, linkage with the database marketing system of a high order can be performed. It is the system whose employment feels easy about a store without computer knowledge, and is possible. In order that a customer does not **** bored and may do, the interface with a customer serves as structure which can be renewed easily. Therefore, a user interface is not obsoleted even if it uses it for a long period of time. It can do easily also in after linkage with the purchase information gathering system by the POS register building. Moreover, since the IC card is used, applications, such as cybermoney, become possible with one card.

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TECHNICAL FIELD

[The technical field to which invention belongs] A contact with a customer is used at the sales site of the various stores and department store to generate [most], a restaurant, etc., and the system and IC card concerning this invention are related with the IC card used for the system and it which serve as customer relation cypripedium and effective structure of management (construction management of the production of a relation of the store and customer who are a feeder).

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PRIOR ART

[Description of the Prior Art] The system which receives a customer's attribute information by issue of a member's card, grasps intention information by CS (Customer Satisfaction) questionnaire, carries out collection analysis of the purchase information by point service, and carries out customer approach by direct mail (DM), telephone, etc. already exists. However, there are the following problems in these.

** Although the 1st coming to the store is carried out, purchase has the problem from which action information is not acquired, when not carrying out. Action information is actions other than a customer's purchase, and coming to the store, an inquiry, a claim, etc. are said. Although these are important customer information, they are not collected as information.

** Although the store etc. is provided with the result which analyzed a questionnaire and the information on point service by the document etc. again, in a sales site, there is a problem that it cannot use for timely customer approach that it is hard to use.

** Although customer data are recorded on the terminal or the headquarters side system, when multi-store expansion is being carried out and the customer of other stores comes, in order service is impossible or to give one's service, there is a problem for which real time network connection with headquarters is needed. That is, use of a computer is required also in sales sites, such as a general store, usually, it is hard to use for treatment, being unfamiliar to it, and there is a problem which is insufficient of timely customer approach structure.

** Although the information terminal which a customer operates by uninhabited is installed as an information offer terminal to a customer, it has not aimed at collection of action information for the purpose of only information offer. And there is a problem that the information to offer is restricted to the uniform menu.

** Information was not memorized by the card but, generally is memorized only to the terminal side. Even when having memorized on the card like an IC card, it is attribute information and dealings information and action information is not memorized.

[0003] On the other hand, with a tradename with a "network display" or the "interchange gate", a display, a touch panel, and the display terminal that unified the main part function (browser ability and network function) can be developed (the SEIKO EPSON incorporated company make), and, unlike conventional personal computer equipment, an unfamiliar person can use an information terminal now for a computer easily recently. The display concerned has the function which can peruse Web data only by touching a screen by touch-panel adoption. (In the following and a claim, such a display is carried out to a "network information terminal".) However, in the field of this invention system, in spite of developing such a network information terminal, since it is not used effectively, a good customer relation cypridium system with a customer and management were not built, but a problem like the above-mentioned ** - ** has twisted that it is unsolved

[Translation done.]

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EFFECT OF THE INVENTION

[Effect of the Invention] As mentioned above, it comes to be able to perform collection of action information in case the conventional purchase information or not the intention information at the time of CS activity but a customer does not purchase like a detailed explanation according to the system of this invention. Moreover, information required at a store and information required in headquarters can be divided, and it can consider as effectively utilizable structure. Therefore, linkage with the database marketing system of a high order can be performed. It is the system whose employment feels easy about a store without computer knowledge, and is possible. In order that a customer does not **** bored and may do, the interface with a customer serves as structure which can be renewed easily. Therefore, a user interface is not obsoleted even if it uses it for a long period of time. It can do easily also in after linkage with the purchase information gathering system by the POS register building. Moreover, since the IC card is used, applications, such as cybermoney, become possible with one card.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] Then, this invention tends to build the system which can solve the above technical problems and which plots, namely, grasps action information other than a customer's attribute information, intention information, and dealings information. If it puts in another way, you are going to make it shift to the marketing process by experience before purchase from the service process by the conventional experience after purchase. Next, it is in providing a customer's truth with the information which is concerns using the above-mentioned network information terminal. Drawing 1, although it was the purpose of only offering the thing of the contents which turned, the information which *(ed) to a customer's attribute, or dealings and action information tends to be analyzed, and it is going to provide real time with the conventional information terminal. furthermore, the system which the IC card distributed to a customer is made to memorize customer data, and installs them in a store in order to raise convenience for the purpose of the system which the man of a general store without the knowledge of a computer can employ — the above — the new network information terminal should be used

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MEANS

[Means for Solving the Problem] The 1st of the summary of this invention for solving the above-mentioned technical problem By the IC card which a customer carries, and the network information terminal and IC card reader writer with which the store was equipped By being a system for carrying out construction management of the mutual production of a relation in a store with a customer, and a customer side's inserting in IC card reader writer of a store the IC card on which the attribute information of self was recorded, and making attribute information read While being able to grasp the information about self concerns from the network information terminal concerned A store side is in the customer relation cypridium system using the IC card characterized by the ability to grasp the action information about the customer concern d from the operation history of a network information terminal. Since it is this system, construction management of the production of a good relation with a customer can be carried out.

[0006] The 2nd of the summary of this invention for solving the above-mentioned technical problem is an IC card for using it for the above-mentioned customer relation cypridium system, and is in the IC card characterized by recording a customer's attribute information, dealings information, and action information on a data area at least. Since it is this IC card, it can use for construction management of the production of a good relation with a customer.

[0007]

[Embodiments of the Invention] Before explaining this structure of a system, in order to grasp the concept, suppose that each function in which this invention system possesses is explained. Drawing 1 is drawing explaining the function and its practical use field of a system of this invention. IC card reader writer and 13 show the hub, and, as for the inside of drawing 1, and 11, a network information terminal and 12 show Ethernet (registered trademark), as for 14. The customer who uses the information terminal 11 will insert and use self IC card 3 for IC card reader writer 12. this invention system tends to attain the purpose by dividing roughly and using six functions. with the six functions, it (6)-selling-support-functions [(1) goods information offer function, (2) point functions, (3) game functions, (4) navigation functions, the information function from (5) shops (store), and], and comes out Hereafter, the each function and example of practical use are enumerated and explained.

[0008] (1) There are a goods information offer function, goods information common to a customer as the example goods information of practical use, and personal goods information. The content is as follows.

<new goods information> ** [which introduces — common goods information offer —** goods information using a still picture and an animation] by the material of <goods information> ** goods which introduces the information on the goods currently dealt with using a still picture Introduce how to take the method of handling [goods], for example, wash and a wrinkling, how to treat, etc. using a still picture and an animation. The goods currently <handling information [classified by goods]> ** Dealt with are searched with according to an item, a color, and size etc. The order of the goods which are not in <reference goods information> ** stock, and foreign goods which displays goods information, Display the purchase history recorded on the IC card of the <reservation application of goods> — personal goods information offer —** customer who proposes. The occupation of the attribute information which entered at the time of a <purchase

history display> ** membership card application, and was recorded on the IC card to originate it enters at the time of the <male senior ITEMU display classified by occupation> ** membership card application which displays the recommended article to the customer concerned. Based on the age of the attribute information recorded on the IC card, display the recommended article to the customer concerned. It enters at the time of a <male senior ITEMU display classified by age> ** membership card application, and there is <a male senior ITEMU display classified by personal color> etc. which displays the recommended article to the customer concerned based on the favorite color currently recorded on the IC card.

[0009] (2) By inserting in a reader/writer the <coming-to-the-store point grant> ** IC card which gives one point per to a customer's IC card day whenever it inserts a point function and its example of practical use ** IC card in a reader/writer Introduce the information on the present which can be exchanged when the point more than <point reference> ** fixed is saved by the picture. [which displays the present point size] After displaying the content of a <content display of present> ** present, there is <point exchange> etc. exchanged for the point by choosing the picture of goods to exchange.

[0010] (3) When a game function and its example of practical use ** customer have you reply to the <sense-amplifier quiz> ** questionnaire which can increase the point held by carrying out a terminal and a game, there is <a lucky item display classified by constellation> etc. which displays an item with the constellation of the <CS questionnaire function> ** customer who gives one point.

[0011] (4) There is <selection information of the last perusal information> which can provide a customer with a continuation of perusal last time by recording the log of the contents which the customer perused on the IC card, and displaying a minute on a screen several [past] times a navigation function and last time [its / example of practical use **].

[0012] (5) the information function from a shop (store), and example of practical use ** -- there are <an opinion, a comment input>, etc. from a visitor which receives the information from the guidance of bargain information and the <receptionist> ** customer who offer the <store information-display> ** bargain information besides < which offers the information on a store besides store information-display > ** that the information on the store concerned is offered

[0013] (6) Display information that the information of the customer under surveillance of a network information terminal is another on the screen of an administrative personal computer as contents for a selling support function and its example of practical use ** salesclerks. It is not the <visitor information display> which becomes possible [that this provides a salesclerk with the data which should be offered to a customer], and since it is not displayed for salesclerks on a network information terminal, this content is deleted from drawing 1.

** When a customer inserted an IC card in a reader writer, the <message functional information classified by customer>, for example, a "Hanamoto O child, which displays the message for every customer inputted beforehand, and size curing of the skirt of the trousers of an order were completed. Please speak to a salesclerk. " " How are the goods which it kept in a lack last time? . Even a salesclerk needs to speak. It is " etc.

[0014] Next, the concrete composition of this invention system is explained. Drawing 2 is drawing explaining the system configuration of this invention. Like drawing 2, by installing in a general store and installing in two or more stores of a specific area, the system of this invention tends to aim at an improvement of communication with a customer, and tends to carry out construction management of the customer relation cypridium. Although a meaning with a specific geographical area is also included, as long as it is connectable in a network, the inside of a specific area can be considered. Although especially the target number of shops is not restricted, management is easy if it is about 40 stores from not making amount of information excessive or the purpose for a specific area. Moreover, it is desirable that they are goods of the same kind in the ability to do and the dealer of service. Therefore, it can be preferably used among s quence stores, such as a boutique which carries out multi-store xpansion, a glasses store, a family restaurant which the latency time generates, and a car accessory shop, etc.

[0015] Although it therefore differs also in the scale in each counter and service counter of each store 1, about about ten network information terminals 11 to which IC card reader writer 12 was

attached and are installed from several stores. Each network information terminal 11 is connected to a server 15 through a hub (line concentrator linked to a radial) 13 with Ethernet (on the other hand formula [Ethernet (registered trademark); bus type LAN] 14, and data delivery with the host computer 100 which generalizes the store set group of a specific area further is performed. 10BASE-T is preferably used for the cable of Ethernet, and data delivery with a host computer 100 is performed by an archive medium or on-line batch processing, such as CD-ROM. It is desirable that administrative [PC / 10] (personal computer) is further installed in each store, and when a customer uses an IC card and you want to know the contents of a customer's attribute information or the screen in view ** by the store side, it can use administrative [this / PC]. Moreover, IC card reader/writer 12 is attached to administrative [PC / 10], and it can be used for issue of a member card etc.

[0016] The network information terminal 11 is a Web (World Wide Web) perusal terminal which unified main part functions, such as a display, a touch panel, a browser, and a network function, and as mentioned above, since it is a compact design, it can be used, being able to hang, or it can be used for a wall on a table side, placing it. Moreover, though it is compact specification, animation video etc. can be used with a high-speed graphic or a sound function, and pleasure can be directed. As a feature on operation, by touch-panel adoption of an analog resistance film method, a Web screen can be perused only by touching a screen, and easy operability can be realized. Moreover, since it does not have a hard disk leading to failure but browser software is also downloaded from a server 15, the maintenance of a system becomes only a server side, it is wide opened from complicatedness, and the possibility of a trouble is mitigated sharply.

[0017] Such a network information terminal can realize the rich display force by carrying a color display and a high-speed graphic chip. Moreover, since HTML contents are used as the base, creation of contents is easy. An animation is also reproducible with data, such as an audio video, and commercials can be passed while not using the terminal. Furthermore, pleasant production is made using a quality sound and a variety of game can also be carried out by the animation function.

[0018] Such a network information terminal 11 is installed in every place of each counter in a store so that a customer can access freely. When a customer uses the network information terminal 11, it is necessary to insert in a reader/writer IC card 3 which is a member card. About IC card 3, although mentioned later, the data area which records dealings information and action information, such as a data area on which attribute information, such as a member number and a member name, is recorded, a purchase day, and purchase items, is prepared. IC card reader/writer 12 has the function to write information in an IC card through the end-connection child of an IC card, and to read information.

[0019] As data recorded on IC card 3 which is a customer's member card on the other hand (1) ** member number, ** member name, ** address, ** telephone number, ** birth date, ** sex, ** occupation, ** hobby, etc. occur as member attribute information data. as (2) member action information data ** There are a coming-to-the-store date, ** point, a ** reference history (histories, such as a reference day and a terminal screen number for which it referred), a ** game history, etc.

(3) As member intention information data, there are ** intention information, a **CS questionnaire result, etc.

(4) As member dealings information, there is ** dealings information (a purchase day, purchase items, amount of money), and there are a store code for **, ** person-in-charge code, ** lottery date, a ** lottery result, etc. as (5) store information. As memory space of the IC card which records these, since 130 bytes of data area and about 254 bytes of use field are [minimum] necessary, about 1024 bytes is preferably needed.

[0020] If IC card 3 is inserted in IC card reader/writer 12 of the network information terminal 11 which the customer came to the store and was installed in the counter, the customer information memorized by the IC card is displayed in an instant on the administrative personal computer 10 in a store counter side, or a server 15, and customer information can be grasped on real time in a store side. Moreover, the customer attribute information data and the operation information in an IC card are memorized to a server, and the operation result of a terminal can

output the customer analysis data of the day on the basis of the customer's attribute information (sex, age, etc.). Moreover, effect analysis of the event can grasp within the day by combining with event information (an event, contest, etc.). Furthermore, by transmitting the data memorized to the server to the host computer 100 of headquarters, data can be passed to the database marketing system of a high order, and it can utilize as time series analysis or all store analytical data. The analysis result can be transmitted to the server of a store, and it can also utilize. Moreover, since all customer data are memorized to the IC card, also in a store besides a sequence, the same service can receive a customer.

[0021] Next, the example of the usage of the system of this invention is explained. Drawing in which drawing 3 shows the screen flow of a network information terminal, drawing 4 - drawing 6 are drawings explaining the example of the screen display of a system utilization time. Like drawing 3, at the time on a drawing features, if the customer as whom the commercials by the screen saver or the animation are displayed (P1) inserts IC card 3 in the reader/writer 12, a menu screen will be displayed (P2). When carrying out point grant to this operation of a customer, the coming-to-the-store point is given, and the content is displayed, when it searches from a customer's attribute information and there is a message to the customer concerned. A menu screen. For example, (A) goods information, (B) personal information, (C) point information, (D) It can consider as shopping information and the information on (E) and others. For example, if a customer chooses the menu of (A) goods information, the selection screen of goods information will be displayed (P3), and if the menu of (B) personal goods information is chosen, the goods information suitable for customer's individual's taste will be displayed (P4). The same is said of the case of other menu selection (P5, P6, P7), and in selection of the (F) end, an IC card is discharged and it ends.

[0022] Based on each screen, it explains below. Each of these is examples and it can change into the favorite content — obvious — it is. When a customer approaches a network information terminal, the screen saver is working to (1) terminal, or the commercials by the animation are displayed on it (drawing 4 (A)).

(2) If a customer inserts IC card 3 in IC card reader/writer 12, the customer information memorized in relation to the customer concerned will be expressed in administrative [by the side of the counter of ** store / PC / 10], or server 15 screen as real time. Since the access data concerned are memorized serially, reference/reference of them can also be carried out later. On the other hand, a customer's name, the accumulating-totals coming-to-the-store point, and virtual-online-shop information are displayed on ** network information terminal 11 (drawing 4 (B)). A network information terminal is indicated a short time for about several seconds, and it changes to a game selection screen automatically (drawing 4 (C)).

[0023] (3) When a customer chooses "it carries out" for a game, change to a game screen. When "it does not carry out" is chosen for a game, the coming-to-the-store point 1 is added, and it changes to another menu selection screen (drawing 4 (D)). On this screen, a button indication which can perform selection of ** (common) goods information, ** personal (goods) information, ** point exchange, ** shopping information, other information [**], ** message/message, and ** end button ** is given. In addition, when ** and other information are chosen, the lucky item display classified by a bargain information screen and constellation etc. can be chosen.

[0024] (4) The screen which can reservation-propose [of new goods information, goods information (according to individual) the handling information classified by goods, and goods], and can ** is expressed as a common goods information screen as mentioned above. Based on the attribute information exception on ** IC card, a goods screen required for a customer is expressed as a personal goods information screen one by one. Personal goods information displays the goods in which a customer is likely to get interested an occupation exception, an age exception, according to a personal color, etc. beforehand.

[0025] (5) When a customer chooses "it carries out" for a game, change to a game screen. The next game screen — ** game start message and ** game start — it is **-accumulating-totals-point-displayed, and **, a screen changes automatically in order of **->**->**, and a game begins. After a game is completed, it changes to a point exchange screen (drawing 5 (A)).

[0026] (6) The content of a present and the accumulating-totals point are displayed on a point

exchange screen (drawing 5 (B)). If the content of a present is chosen, a present trademark and the required point will be displayed, and if goods are chosen, it will become the screen of mailing-address guidance.

[0027] (7) On the screen of mailing-address guidance, when the mailing address of a customer's address is displayed from the attribute information on an IC card and it chooses other mailing addresses, a keyboard will be displayed and a character input will be performed from a touch panel. If a mailing address is determined, a mailing-address confirmation button will be pushed (drawing 5 (C)).

[0028] (8) On the screen of bargain information, the bargain information under operation and the bargain information on one of these days operation schedule are expressed as the other stores in a store. After bargain information is displayed, a screen change indication of a game screen selection button etc. is given (drawing 6 (A)).

(9) Display that a customer's fortune-telling chooses today's fortune-telling screen with a birth date, a constellation, etc. After a fortune-telling screen is displayed, a screen change indication of a game screen selection button etc. is given (drawing 6 (B)).

[0029] The data which the customer operated on each above-mentioned screen can be memorized to an administrative PC side, and can perform the behavior analysis of the customer of the day by using the member number of the raw data etc. as a key, and serial detailed analysis and all store analysis of them are attained by transmitting the stored data concerned to host system (for example, host computer 100). Since a customer takes care not to be bored, when the customer has not operated the information terminal on the basis of HTML contents with easy creation or renewal of contents, animations, such as commercials, can be passed and a game can also be enjoyed by the animation function. In order to promote a customer's terminal handling, by being able to carry out structure, such as carrying out double precision of the coming-to-the-store point by addition and the game result of the coming-to-the-store point, and memorizing the history of a terminal handling on a card, the menu screen which met a customer's taste with the data can be created on real time, and a message peculiar to the customer concerned can be displayed.

[0030] A system configuration is considered as the terminal (even if it power-supply-turns on and being turned off, data storage does not have data corruption, in order not to carry out) composition which displays the server (possible also on notebook computer level) by which WindowsNT was carried, and HTML contents by the browser. It is only the result of the HTML contents he can do exchange simply even if data break to a server, goods data, and its day, and it does not have the customer database which is not easy to change, but all customer data are structure which it has in an IC card.

[0031] Drawing 7 is drawing showing the example of a screen displayed on the network information terminal at the time of customer coming to the store. It is the example as which the screen corresponding to drawing 4 (D) was displayed. If a customer inserts in the reader writer 12 IC card 3 which is a member card, while a customer name will be displayed on 11d of display screens of a terminal, the coming-to-the-store point is added and the present sum total point mark are displayed. Furthermore, goods information (common goods information), personal goods information, point exchange, the information on other, and the selection button are displayed. Moreover, the button and end button which choose a message message are displayed.

[0032] Drawing 8 is drawing showing the example of a screen displayed on a network information terminal, when a customer chooses personal goods information. On the screen of personal goods information, a screen display of the newest goods information about the woman in the first half of the 20th generation is carried out as an item according to age like drawing 8 . The message message button is displayed on the screen lower part of a network information terminal. When choosing a message message button, the message prepared to the specific customer above beforehand is displayed.

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EXAMPLE

[Example]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is drawing explaining the function and its practical use field of a system of this invention.

[Drawing 2] It is drawing explaining the system configuration of this invention.

[Drawing 3] It is drawing showing the screen flow of a network information terminal.

[Drawing 4] It is drawing explaining the example of the screen display of a system utilization time.

[Drawing 5] It is drawing explaining the example of the screen display of a system utilization time.

[Drawing 6] It is drawing explaining the example of the screen display of a system utilization time.

[Drawing 7] It is drawing showing the example of a screen displayed on the network information terminal at the time of customer coming to the store.

[Drawing 8] When a customer chooses personal goods information, it is drawing showing the example of a screen displayed on a network information terminal.

[Description of Notations]

1 Store

3 IC Card (Member Card)

10 Administrative [PC]

11 Network Information Terminal

11d Network information terminal display screen

12 IC Card Reader Writer

13 Hub

14 Ethernet

15 Server

100 Host Computer

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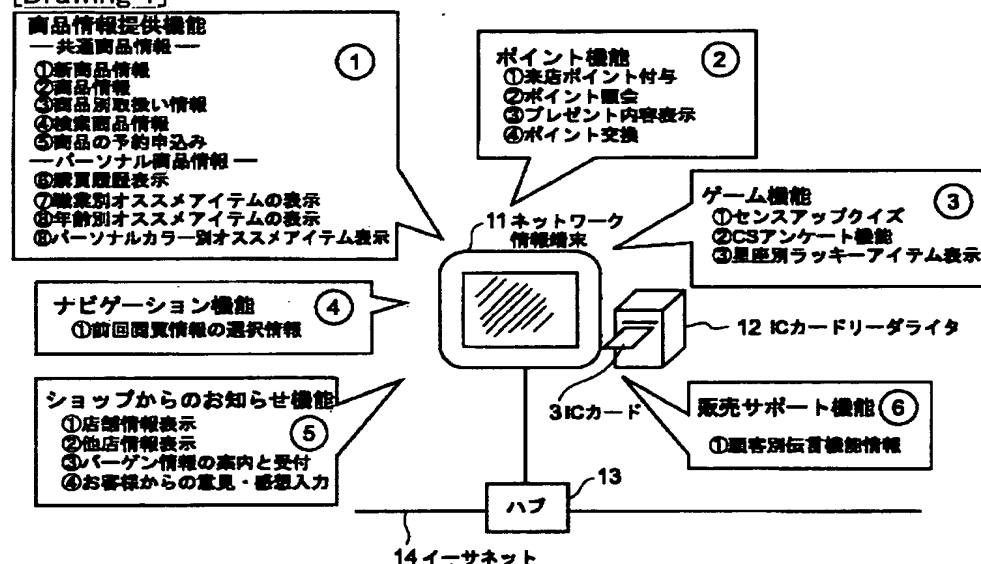
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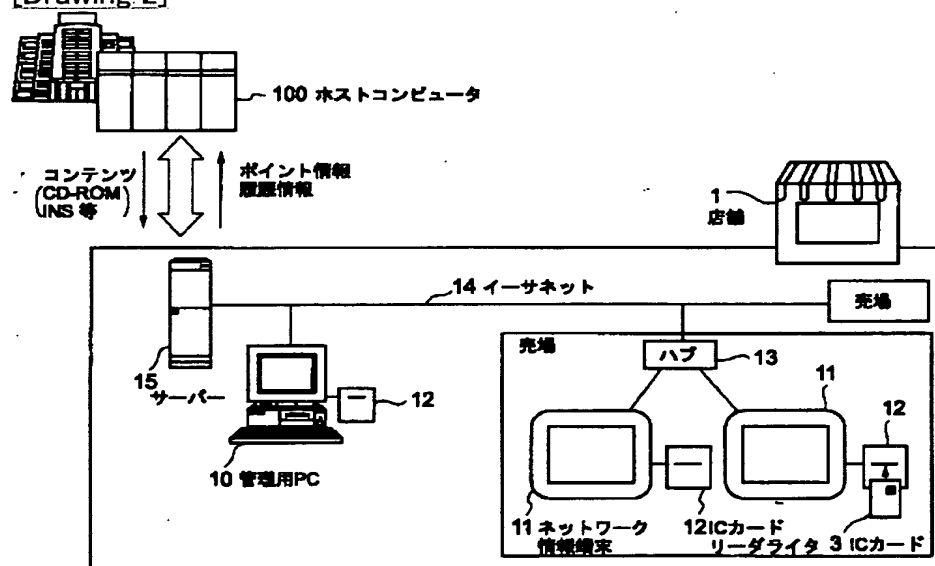
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DRAWINGS

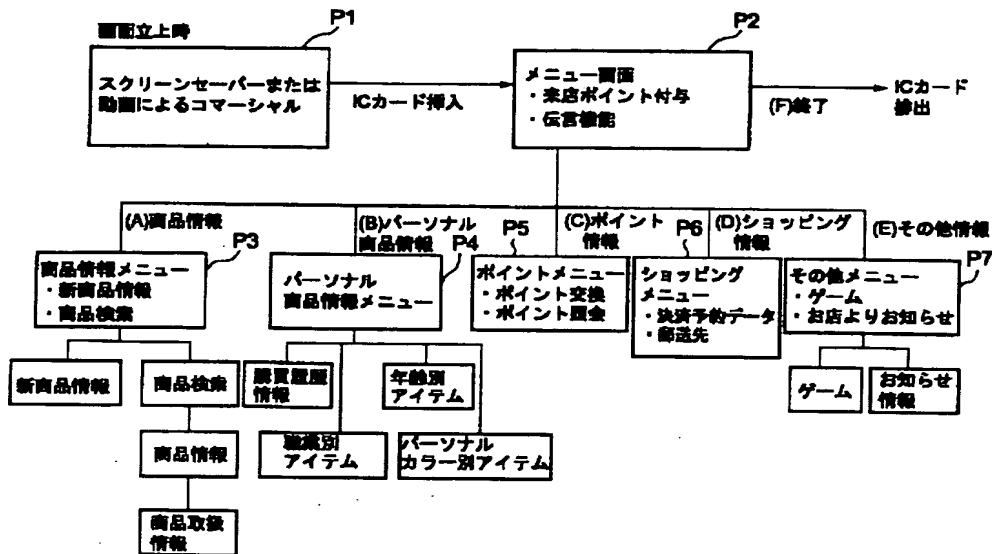
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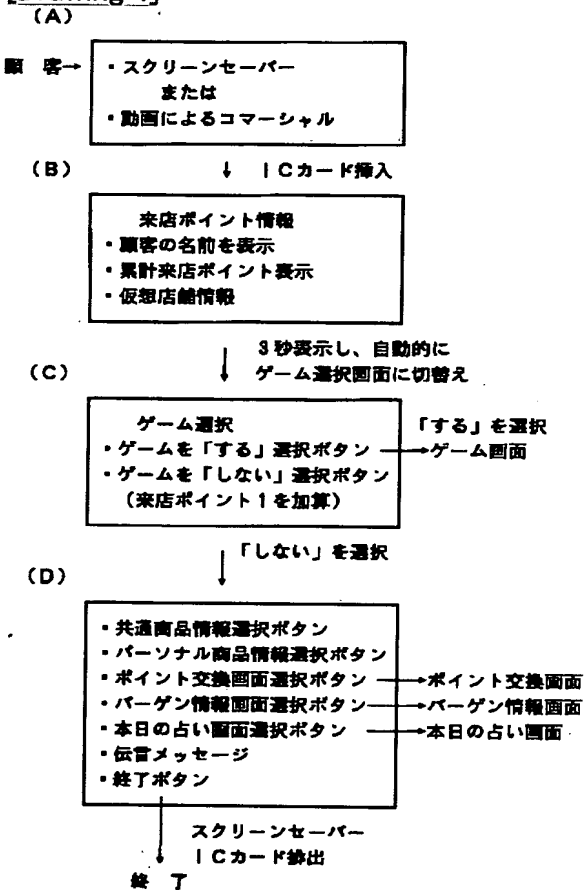
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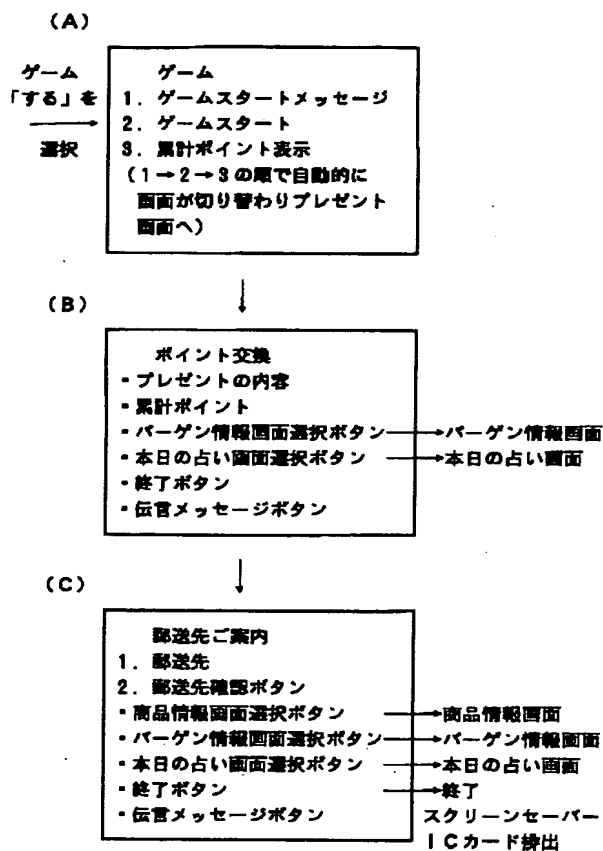
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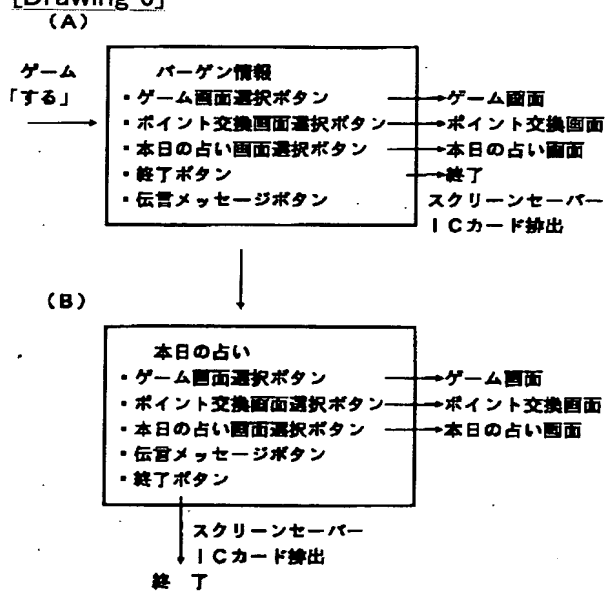
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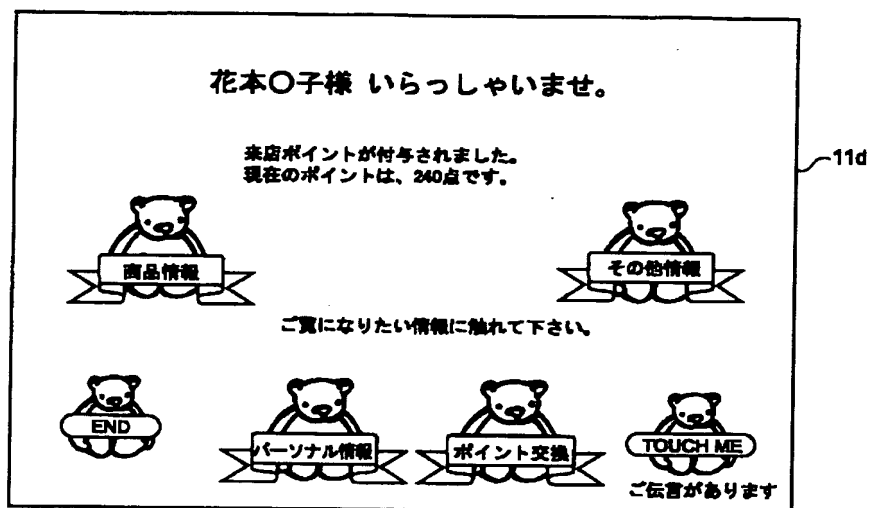
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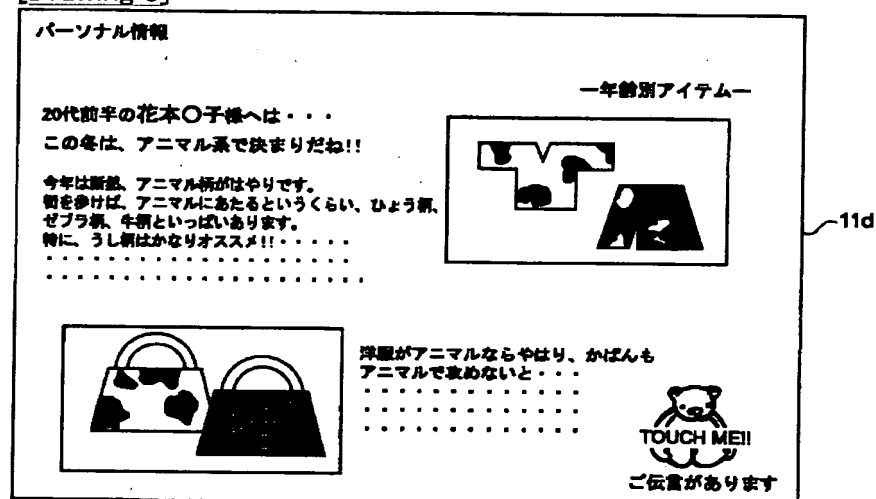
[Drawing 6]



[Drawing 7]



[Drawing 8]



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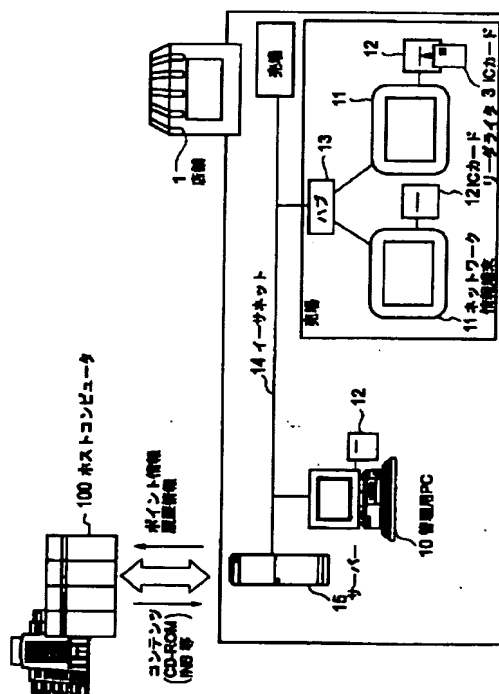
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(54) 【発明の名称】 ICカードを利用したカスタマ・リレーションシップ・システムおよびICカード

(57) 【要約】

【課題】 顧客と店舗との間における関係づくりを構築管理するカスタマ・リレーションシップ・システムおよびそれに使用するICカードを提供する。

【解決手段】 本発明のICカードを利用したカスタマ・リレーションシップ・システムは、顧客の携帯するICカードと、店舗に備えられたネットワーク情報端末およびICカードリーダライタとにより、顧客と店舗における相互間の関係づくりを構築管理するためのシステムであって、顧客側は自己の属性情報が記録されたICカード3を店舗のICカードリーダライタ12に挿入して属性情報を読み取らせることにより、当該ネットワーク情報端末11から自己の関心事に関する情報を把握することができる。店舗側はネットワーク情報端末11の操作履歴より当該顧客に関する行動情報を把握することができることを特徴とする。本発明のICカードは、このようなシステムに使用するICカードであって、データ領域には、少なくとも顧客の属性情報、取引情報および行動情報が記録されることを特徴とする。



【特許請求の範囲】

【請求項1】 顧客の携帯するICカードと、店舗に備えられたネットワーク情報端末およびICカードリーダーライタとにより、顧客と店舗における相互間の関係づくりを構築管理するためのシステムであって、顧客側は自己の属性情報が記録されたICカードを店舗のICカードリーダーライタに挿入して属性情報を読み取らせることにより、当該ネットワーク情報端末から自己の関心事に関する情報を把握することができるとともに、店舗側はネットワーク情報端末の操作履歴より当該顧客に関する行動情報を把握することができることを特徴とするICカードを利用したカスタマ・リレーションシップ・システム。

【請求項2】 店舗側には、さらに管理用パーソナルコンピュータが備えられていることを特徴とする請求項1記載のICカードを利用したカスタマ・リレーションシップ・システム。

【請求項3】 店舗側のネットワーク情報端末が特定地域の店舗集合群を統括するホストコンピュータに接続していることを特徴とする請求項1および請求項2記載のICカードを利用したカスタマ・リレーションシップ・システム。

【請求項4】 顧客の携帯するICカードには、少なくとも属性情報、取引情報および行動情報が記録されるデータ領域が設けられていることを特徴とする請求項1から請求項3記載のICカードを利用したカスタマ・リレーションシップ・システム。

【請求項5】 店舗側が顧客に提供する情報には、少なくとも顧客の携帯するICカードから得られた属性情報に基づくパーソナル商品情報が含まれることを特徴とする請求項1から請求項3記載のICカードを利用したカスタマ・リレーションシップ・システム。

【請求項6】 請求項1記載のカスタマ・リレーションシップ・システムに使用するためのICカードであって、データ領域には、少なくとも顧客の属性情報、取引情報および行動情報が記録されることを特徴とするICカード。

【発明の詳細な説明】**【0001】**

【発明の属する技術分野】 本発明にかかるシステムとICカードは、顧客との接点が最も多く発生する各種店舗や百貨店のセールス現場、レストラン等で使用されるものであり、カスタマ・リレーションシップ、マネジメント（供給者である店舗と顧客との関係づくりの構築管理）の有効な仕組みとして役立つシステムおよびそれに使用するICカードに関する。

【0002】

【従来の技術】 メンバーズカードの発行により顧客の属性情報を入手し、CS（Customer Satisfaction）アンケートにより意向情報を把握し、

ポイントサービスにより購買情報を収集分析し、ダイレクトメール（DM）や電話などで顧客アプローチするシステムは既に存在する。しかし、これらには以下のような問題がある。

①第1に、来店はするが購買はしない場合には行動情報が得られない問題がある。行動情報とは、顧客の購買以外の行動で、来店、問い合わせ、クレームなどをいう。これらは重要な顧客情報ではあるが情報として集約されていない。

②また、アンケートやポイントサービスの情報を分析した結果は、店舗等に帳票等で提供されてはいるが、セールス現場では使い難くタイムリーな顧客アプローチに利用できないという問題がある。

③顧客データは端末あるいは本部側システムに記録されているが、多店舗展開している場合、他店の顧客が来た場合にサービスができないか、サービスするためには本部とのリアルタイムなネットワーク接続が必要となる問題がある。すなわち、一般店舗などのセールス現場でもコンピュータの使用が必要であり、通常は扱いに不慣れであって使い難く、タイムリーな顧客アプローチ仕組みが不足している問題がある。

④顧客への情報提供端末としては、無人で顧客が操作する情報端末を設置しているが、情報提供のみの目的で行動情報の収集を目的としていない。しかも提供する情報が画一的なメニューに限られているという問題がある。

⑤情報はカードには記憶されず、一般に端末側にのみ記憶している。ICカードのようにカードに記憶している場合でも属性情報や取引情報であって行動情報までは記憶していない。

【0003】 一方、最近、「ネットワークディスプレイ」あるいは「インターゲート」との商品名で、ディスプレイ、タッチパネル、本体機能（ブラウザ機能・ネットワーク機能）を一体化したディスプレイ端末が開発され（セイコーエプソン株式会社製）、従来のパーソナルコンピュータ装置と異なり、コンピュータに不慣れの人が簡単に情報端末を使用することができるようになってきている。当該ディスプレイは、タッチパネル採用により、画面に触れるだけでWebデータを閲覧できる機能を有している。（以下、および特許請求の範囲ではこのようなディスプレイを「ネットワーク情報端末」ということにする。）しかし、このようなネットワーク情報端末が開発されているにもかかわらず、本発明システムの分野では有効に利用されていないため、顧客との良好なカスタマ・リレーションシップ・システム、マネジメントが構築されず、上記①～⑤のような問題が未解決となっている。

【0004】

【発明が解決しようとする課題】 そこで本発明は、上記のような課題を解決することができる仕組み、すなわち顧客の属性情報、意向情報、取引情報以外の行動情報を

把握するシステムを構築しようとするものである。換言すれば従来の購買後体験によるサービスプロセスから購買前体験によるマーケティングプロセスに移行させようとするものである。次に、顧客の真に関心事である情報を上記ネットワーク情報端末を利用して提供することにある。従来の情報端末は画一化した内容のものを提供するのみの目的であったが、顧客の属性や取引、行動情報に則した情報を解析しリアルタイムに提供しようとするものである。さらに、コンピュータの知識がない一般店舗の人が運用できるシステムを目的とするものであって、利便性を高めるため顧客データを顧客へ配付するICカードに記憶させておき、店舗に設置するシステムは、上記新規なネットワーク情報端末を利用したものとするものである。

【0005】

【課題を解決するための手段】上記課題を解決するための本発明の要旨の第1は、顧客の携帯するICカードと、店舗に備えられたネットワーク情報端末およびICカードリーダーライタとにより、顧客と店舗における相互間の関係づくりを構築管理するためのシステムであって、顧客側は自己の属性情報が記録されたICカードを店舗のICカードリーダーライタに挿入して属性情報を読み取らせることにより、当該ネットワーク情報端末から自己の関心事に関する情報を把握することができるとともに、店舗側はネットワーク情報端末の操作履歴より当該顧客に関する行動情報を把握することができることを特徴とするICカードを利用したカスタマ・リレーションシップ・システム、にある。かかるシステムであるため、顧客との良好な関係づくりを構築管理することができる。

【0006】上記課題を解決するための本発明の要旨の第2は、上記のカスタマ・リレーションシップ・システムに使用するためのICカードであって、データ領域には、少なくとも顧客の属性情報、取引情報および行動情報が記録されることを特徴とするICカード、にある。かかるICカードであるため、顧客との良好な関係づくりの構築管理に利用することができる。

【0007】

【発明の実施の形態】本システムの構成を説明する前に、その概念を把握するために、本発明システムが具備する各機能について説明することとする。図1は、本発明のシステムの機能とその活用分野を説明する図である。図1中、11はネットワーク情報端末、12はICカードリーダーライタ、13はハブ、14はイーサネット（登録商標）を示している。情報端末11を使用する顧客はICカードリーダーライタ12に自己のICカード3を挿入して使用することになる。本発明システムは、大別して6つの機能を利用することによりその目的を達成しようとする。その6つの機能とは、（1）商品情報提供機能、（2）ポイント機能、（3）ゲーム機能、

（4）ナビゲーション機能、（5）ショップ（店舗）からのお知らせ機能、（6）販売サポート機能、である。以下、その各機能と活用例を列挙して説明する。

【0008】（1）商品情報提供機能とその活用例

商品情報としては、顧客に共通な商品情報とパーソナルな商品情報とがある。その内容は以下のとおりである。

——共通商品情報提供——

- ①商品情報を静止画と動画を用いて紹介する、＜新商品情報＞
- ②取り扱っている商品の情報を静止画を用いて紹介する、＜商品情報＞
- ③商品の素材によって、商品の取扱い法、例えば洗濯・しわの取り方・扱い方等を静止画と動画を用いて紹介する、＜商品別取扱い情報＞
- ④取り扱っている商品をアイテム・色・サイズ別等で検索し、商品情報を表示する、＜検索商品情報＞
- ⑤在庫にない商品や外国商品の取り寄せ、申込みを行う＜商品の予約申込み＞

——パーソナル商品情報提供——

- ⑥顧客のICカードに記録された購買履歴を表示する、＜購買履歴表示＞
- ⑦会員証申込み時に記入し、ICカードに記録された属性情報の職業を元に、当該顧客に対するおすすめ品を表示する、＜職業別オススメアイテム表示＞
- ⑧会員証申込み時に記入し、ICカードに記録された属性情報の年齢を元に、当該顧客に対するおすすめ品を表示する、＜年齢別オススメアイテム表示＞
- ⑨会員証申込み時に記入し、ICカードに記録されている好みの色彩を元に、当該顧客に対するおすすめ品を表示する、＜パーソナルカラー別オススメアイテム表示＞等がある。

【0009】（2）ポイント機能とその活用例

- ①ICカードをリーダー／ライタに挿入する毎に顧客のICカードに1日1ポイントを付与する、＜来店ポイント付与＞
- ②ICカードをリーダー／ライタに挿入することにより、現在のポイント数を表示する、＜ポイント照会＞
- ③一定以上のポイントが貯まった場合に交換できるプレゼントの情報を画像により紹介する、＜プレゼント内容表示＞
- ④プレゼント内容を表示した後、交換したい商品の画像を選択することにより、ポイントと交換する、＜ポイント交換＞等がある。

【0010】（3）ゲーム機能とその活用例

- ①顧客が端末とゲームをすることにより保有しているポイントを増やすことができる、＜センスアップクイズ＞
- ②アンケートに回答して頂くと1ポイントを付与する、＜CSアンケート機能＞
- ③顧客の星座によりアイテムを表示する＜星座別ラッキー

ーアイテム表示>
等がある。

【0011】(4) ナビゲーション機能とその活用例

①前回、顧客が閲覧した内容のログをICカードに記録しておき、過去数回分を画面に表示することにより、前回閲覧の続きを顧客に提供することができる、<前回閲覧情報の選択情報>がある。

【0012】(5) ショップ(店舗)からのお知らせ機能とその活用例

- ①当該店舗の情報を提供する<店舗情報表示>
 - ②他店舗の情報を提供する<他店舗情報表示>
 - ③バーゲン情報を提供する<バーゲン情報の案内と受付>
 - ④顧客からの情報を入手する<お客様からの意見・感想入力>
- 等がある。

【0013】(6) 販売サポート機能とその活用例

①店員向けのコンテンツとして、ネットワーク情報端末を監視中の顧客の情報とは別の情報を管理用パソコンの画面に表示する。これにより、顧客に対して提供すべきデータを店員に提供することが可能となる、<お客様情報表示>

なお、この内容は店員向けのもので、ネットワーク情報端末に表示されるものではないので、図1からは削除されている。

②顧客がICカードをリーダライタに挿入した時に、予め入力しておいた顧客毎の伝言を表示する、<顧客別伝言機能情報>

例えば、「花本〇子様、ご注文のパンツの裾のサイズ直しが完了しました。店員に声をかけて下さい。」とか「前回、お取り置きしておいた商品はいかがなさいますか?。店員まで声をかけて下さい。」等である。

【0014】次に、本発明システムの具体的構成について説明する。図2は、本発明のシステム構成を説明する図である。図2のように、本発明のシステムは一般の店舗に設置するものであり、特定地域の複数の店舗に設置することにより顧客とのコミュニケーションの改善を図り、カスタマ・リレーションシップを構築管理しようとするものである。特定地域とは地理的な意味も含まれるが、ネットワークで接続できる限り特定地域内と考えることができる。対象となる店舗数は特に制限されないが、情報量を過大としないことや特定地域を対象とする目的から40店舗程度であれば管理が容易である。また、できるかぎり同種の商品、サービスの取扱店であることが好ましい。従って、多店舗展開するブティックや眼鏡店、待ち時間が発生するファミリーレストランやカー用品ショップ等の系列店舗間等で好ましく使用することができる。

【0015】各店舗1のそれぞれの売場やサービスカウンターにはその規模にもよって異なるが、ICカードリ

ーダライタ12の付いたネットワーク情報端末11が数台から数十台程度設置される。各ネットワーク情報端末11はハブ(放射状に接続する集線装置)13を介してイーサネット(Ethernet(登録商標);バス型LANの一方式)14によりサーバー15に接続し、さらに特定地域の店舗集合群を統括するホストコンピュータ100とのデータ受け渡しが行われる。イーサネットのケーブルには10BASE-Tが好ましく使われ、ホストコンピュータ100とのデータ受け渡しは、CD-ROM等の記録メディアまたはオンラインバッチ処理により行われる。各店舗には、さらに管理用PC(パーソナルコンピュータ)10が設置されているのが好ましく、この管理用PCは顧客がICカードを利用した場合に店舗側で顧客の属性情報や観視中の画面の内容を知りたい場合に利用することができる。また、管理用PC10にもICカードリーダライタ12が付属し、会員カードの発行等に使用できる。

【0016】ネットワーク情報端末11は、前記のように、ディスプレイ、タッチパネル、ブラウザ、ネットワーク機能等の本体機能を一体化したWeb(ワールドワイドウェブ)閲覧端末であり、コンパクトな設計であるため壁に掛けて使用したり、テーブルサイドへ置いて使用することができる。また、コンパクトな仕様でありながらアニメーションビデオ等を高速グラフィックやサウンド機能とともに使用することができ楽しさを演出できる。操作上の特徴として、アナログ抵抗膜方式のタッチパネル採用により、画面に触れるだけでWeb画面を閲覧することができ簡単な操作性を実現できる。また、故障の原因となるハードディスクを持たず、ブラウザソフトもサーバー15よりダウンロードするので、システムのメンテナンスはサーバー側のみとなり煩雑さから開放され、トラブルの可能性が大幅に軽減される。

【0017】このようなネットワーク情報端末は、カラーディスプレイと高速グラフィックチップを搭載することによる豊かな表示力を実現できる。また、HTMLコンテンツをベースとしているので、コンテンツの作成が簡単である。オーディオ・ビデオなどのデータにより動画も再生でき、端末を使用していない時にコマercialを流すことができる。さらに、クオリティーサウンドを使って楽しい演出ができ、アニメーション機能により、諸種のゲームをすることもできる。

【0018】このようなネットワーク情報端末11は、顧客が気軽にアクセスできるように店舗内の各売場の各所に設置される。顧客がネットワーク情報端末11を使用する場合は、会員カードであるICカード3をリーダライタに挿入することが必要となる。ICカード3については、後述するが会員番号、会員氏名等の属性情報が記録されるデータ領域と購買日、購買品目等の取引情報および行動情報を記録するデータ領域が設けられる。ICカードリーダライタ12は、ICカードの接続端子を

介してICカードに情報を書き込み、また情報を読み取る機能を有するものである。

【0019】一方、顧客の会員カードであるICカード3に記録するデータとしては、

(1) 会員属性情報データとして、①会員番号、②会員氏名、③住所、④電話番号、⑤生年月日、⑥性別、⑦職業、⑧趣味、等があり、

(2) 会員行動情報データとして、①来店年月日、②ポイント、③検索履歴(検索日、照会した端末画面番号等の履歴)、④ゲーム履歴、等がある。

(3) 会員意向情報データとして、①意向情報、②CSアンケート調査結果、等がある。

(4) 会員取引情報として、①取引情報(購買日、購買品目、金額)があり、

(5) 店舗情報として、①担当店コード、②担当者コード、③抽選年月日、④抽選結果、等がある。これらを記録するICカードのメモリ容量としては、データ領域130バイト、使用領域254バイト程度が最小限必要となるので、好ましくは1024バイト程度が必要となる。

【0020】顧客が来店して売場に設置したネットワーク情報端末11のICカードリーダー12にICカード3を挿入すると、店舗カウンター側にある管理用パソコン10またはサーバー15上に、ICカードに記憶された顧客情報が瞬時に表示され、店舗側ではリアルタイムで顧客情報が把握できる。また、端末の操作結果は、ICカード内の顧客属性情報データと操作情報がサーバーへ記憶され、その顧客の属性情報(性別、年齢など)を基本として、その日の顧客分析資料を出力することができる。また、イベント情報(催事、コンテストなど)と組み合わせることにより、そのイベントの効果分析がその日のうちに把握できる。さらに、サーバーへ記憶されたデータを本部のホストコンピュータ100に送信することにより、上位のデータベースマーケティングシステムへデータを渡すことができ、時系列分析や全店分析データとして活用できる。その分析結果を店舗のサーバーへ転送し、活用することもできる。また、全ての顧客データをICカードに記憶しているため、顧客は系列他店においても、同一なサービスが受けることができる。

【0021】次に、本発明のシステムの利用方法の例について説明する。図3は、ネットワーク情報端末の画面フローを示す図、図4～図6は、システム利用時の画面表示の例を説明する図である。図3のように、画面立上時には、スクリーンセーバーまたは動画によるコマーシャルが表示されている(P1)、顧客がICカード3をリーダー12に挿入すると、メニュー画面が表示される(P2)。顧客のこの操作に対してポイント付与する場合は来店ポイントが付与され、顧客の属性情報から検索して当該顧客に対する伝言がある場合は、その内容

が表示される。メニュー画面は、例えば(A)商品情報、(B)パーソナル情報、(C)ポイント情報、

(D)ショッピング情報、(E)その他の情報、とすることができ、例えば顧客が(A)商品情報のメニューを選択すれば商品情報の選択画面が表示され(P3)、

(B)パーソナル商品情報のメニューを選択すれば顧客の個人の嗜好に適した商品情報が表示される(P4)。その他のメニュー選択の場合も同様であり(P5, P6, P7)、(F)終了を選択の場合は、ICカードが排出されて終了する。

【0022】以下各画面に基づいて説明する。これらはいずれも一例であって、好みの内容に変更できることは自明である。顧客がネットワーク情報端末に接近した際、

(1) 端末には、スクリーンセーバーが働いているか動画によるコマーシャルが表示されている(図4

(A))。

(2) 顧客がICカードリーダー12にICカード3を挿入すると、

①店舗のカウンター側の管理用PC10またはサーバー15画面には、当該顧客に関連して記憶されている顧客情報がリアルタイムで表示される。当該、アクセスデータは時系列的に記憶されるため、後から検索照会することもできる。一方、②ネットワーク情報端末11には、顧客の名前、累計来店ポイント、仮想店舗情報、を表示する(図4(B))。ネットワーク情報端末の表示は数秒程度の短時間とし、自動的にゲーム選択画面へと切り替わる(図4(C))。

【0023】(3) 顧客がゲームを「する」を選択した場合には、ゲーム画面に切り替わる。ゲームを「しない」を選択した場合には、来店ポイント1を加算し、別のメニュー選択画面に切り替わる(図4(D))。この画面では、①(共通)商品情報、②パーソナル(商品)情報、③ポイント交換、④ショッピング情報、⑤その他情報、⑥伝言メッセージ、⑦終了ボタン、の選択のできるボタン表示がされる。なお、⑤その他情報、を選択した場合は、バーゲン情報画面、星座別ラッキーアイテム表示、等を選択できる。

【0024】(4) 共通商品情報画面では前記のように、新商品情報、商品(個別の)情報、商品別取扱い情報、商品の予約申込み、ができる画面が表示される。パーソナル商品情報画面では、①ICカードの属性情報別に基づき、顧客に必要な商品画面を順次表示する。パーソナル商品情報情報は予め職業別、年齢別、パーソナルカラー別等により顧客が興味を持ちそうな商品を表示するようにしておく。

【0025】(5) 顧客がゲームを「する」を選択した場合には、ゲーム画面に切り替わる。次のゲーム画面では、①ゲームスタートメッセージ、②ゲームスタート、③累計ポイント表示、がされ、①→②→③の順で自動的

に画面が切り替わりゲームが開始する。ゲームが終了するとポイント交換画面に切り替わる(図5(A))。

【0026】(6)ポイント交換画面では、プレゼントの内容、累計ポイントが表示される(図5(B))。プレゼントの内容を選ぶと、プレゼント商品名と必要なポイントが表示され、商品を選択すると郵送先ご案内の画面になる。

【0027】(7)郵送先ご案内の画面では、ICカードの属性情報から顧客の住所の郵送先が表示され、その他の郵送先を選択する場合は、キーボードを表示させてタッチパネルから文字入力を行うことになる。郵送先が決定すれば、郵送先確認ボタンを押す(図5(C))。

【0028】(8)バーゲン情報の画面では、店舗内あるいは他店舗で実施中のバーゲン情報、近日実施予定のバーゲン情報が表示される。バーゲン情報が表示された後はゲーム画面選択ボタン等の画面切り替え表示がされる(図6(A))。

(9)本日の占い画面を選択すると生年月日、星座等により顧客の占いを表示する。占い画面が表示された後はゲーム画面選択ボタン等の画面切り替え表示がされる(図6(B))。

【0029】顧客が上記の各画面で操作したデータは、管理用PC10側に記憶し、その生データの会員番号などをキーとして、その日の顧客の行動分析を行うことができ、当該記憶データを上位システム(例えば、ホストコンピュータ100)に送信することにより時系列的な詳細分析や全店分析が可能となる。顧客が飽きないようにするため、コンテンツの作成やリニューアルが容易なHTMLコンテンツを基本とし、顧客が情報端末の操作をしていない時には、コマーシャル等の動画を流すことができ、アニメーション機能によりゲームを楽しむこともできる。顧客の端末操作を促進するためには、来店ポイントの付加やゲーム結果により来店ポイントを2倍するなどの仕組みをすることができ、端末操作の履歴をカード上に記憶することにより、そのデータにより顧客の嗜好に沿ったメニュー画面をリアルタイムに作成し、また、当該顧客に固有のメッセージを表示させることができる。

【0030】システム構成は、Windows NTが搭載されたサーバー(ノートパソコンレベルでも可能)とHTMLコンテンツをブラウザで表示する端末(データの記憶はしないため、電源ON、OFFしてもデータ破壊がない)構成とされる。サーバーには、データが壊れても簡単に入れ替えができるHTMLコンテンツと商品データおよびその日の結果のみであり、入れ替えが容易でない顧客データベースは持たず、顧客データは全てICカードに持つ仕組みである。

【0031】図7は、顧客来店時のネットワーク情報端末に表示される画面例を示す図である。図4(D)に対応する画面が表示された例である。顧客が会員カードで

あるICカード3をリーダライタ12に挿入すると、端末の表示画面11dには顧客氏名が表示されるとともに、来店ポイントが加算されて現在の合計ポイント点数が表示される。さらに、商品情報(共通商品情報)、パーソナル商品情報、ポイント交換、その他の情報、選択ボタンが表示されている。また、伝言メッセージを選択するボタンと終了ボタンが表示されている。

【0032】図8は、顧客がパーソナル商品情報を選択した場合にネットワーク情報端末に表示される画面例を示す図である。図8のようにパーソナル商品情報の画面では、年齢別アイテムとして20代前半の女性に関する最新の商品情報が画面表示されている。ネットワーク情報端末の画面下部には、伝言メッセージボタンが表示されている。伝言メッセージボタンを選択する場合には、前記のように予め特定の顧客に対して準備されたメッセージが表示される。

【0033】

【実施例】(実施例)上記実施形態のシステムを、ネットワーク情報端末として、INTERGATE「モデルND-2000」(セイコーエプソン株式会社製)を使用し、当該端末にICカードリーダライタとして(オムロン株式会社製「ICカードR/WオムロンV4BF-2J-03V」)を接続し、顧客には利用者の属性情報、取引情報を記録し、かつ行動情報が記録されるデータ領域が設けられた接触型ICカード(試作品;1024バイト)を携帯させて実験したところ良好に機能することが確認された。

【0034】上記のように、本発明のシステムによれば、①来店ポイントを付加することにより購買しないウインドーショッピング顧客の来店情報を収集することができ、店に対する忠誠度や行動パターン(会社の休みや来店サイクルなど)の情報を入手することができる。また、②来店ポイント時には、ゲームなどの結果で倍ポイントする仕掛けにより、モチベーションを上げることができる。③端末で最新商品情報やその関連情報(最新トレンド情報、旅行情報など)の情報照会を行い、その操作履歴をICカードに記憶することにより、次回操作時には、顧客毎にカスタマイズされた画面を表示し、嗜好にあった情報提供と個別メッセージによる顧客へのパーソナルアプローチと端末操作利便性が可能となる。それにより、端末操作頻度を高め、操作履歴を行動情報として入手することができる。④店頭展示していない商品(色、サイズ)の検索ができる仕組みをすることにより、現物が無い商品を含めて顧客ニーズへの対応ができ、ニーズも収集できる。

【0035】さらに、本発明のシステムはPOSレジによる取引情報収集システムとの連動が構築後でも容易にできるものである。すなわち、①ポイントシステムなどでPOSレジで入力した取引情報をICカードに書き込むことにより、店舗での取引情報も含めたパーソナ

ルアプローチと顧客の把握ができる。② I Cカード内記憶エリアを共有することにより、他のシステムと連携することもできる。

【0036】

【発明の効果】以上、詳述のように本発明のシステムによれば、従来の購買情報やCS活動時の意向情報ではなく、顧客が購買しない場合の行動情報の収集ができるようになる。また、店舗で必要な情報と本部で必要な情報を分けて、効果的に活用できる仕組みとすることができる。従って、上位のデータベースマーケティングシステムとの連動ができる。コンピュータ知識のない店舗で安心して運用ができるシステムとなっている。顧客が飽きなくするために、顧客とのインターフェイスが簡単にリニューアルできる仕組みとなっている。従って、長期間使用してもユーザーインターフェイスを陳腐化させない。POSレジによる購買情報収集システムとの連動が構築後でも容易にできる。また、I Cカードを使用しているため、電子マネーなどのアプリケーションが1枚のカードで可能となる。

【図面の簡単な説明】

【図1】 本発明のシステムの機能とその活用分野を説明する図である。

【図2】 本発明のシステム構成を説明する図である。

【図3】 ネットワーク情報端末の画面フローを示す図

である。

【図4】 システム利用時の画面表示の例を説明する図である。

【図5】 システム利用時の画面表示の例を説明する図である。

【図6】 システム利用時の画面表示の例を説明する図である。

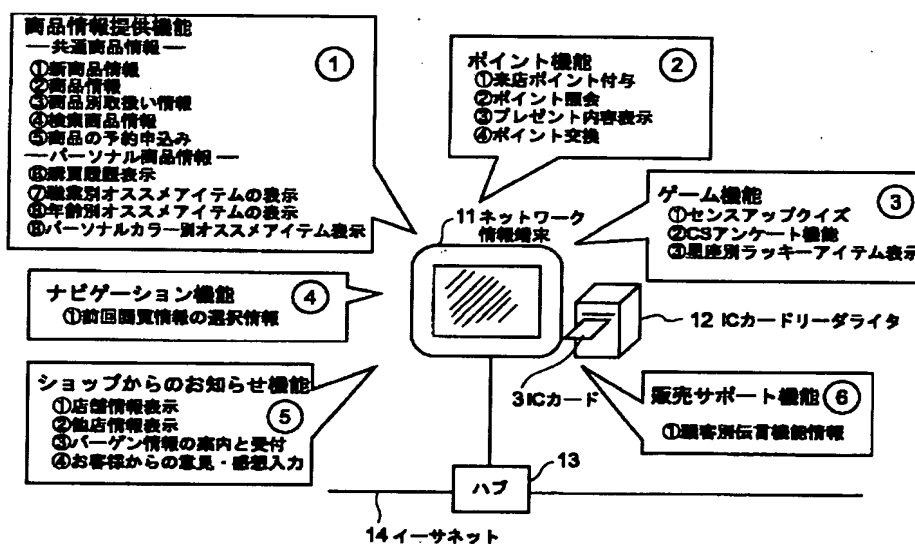
【図7】 顧客来店時のネットワーク情報端末に表示される画面例を示す図である。

【図8】 顧客がパーソナル商品情報を選択した場合にネットワーク情報端末に表示される画面例を示す図である。

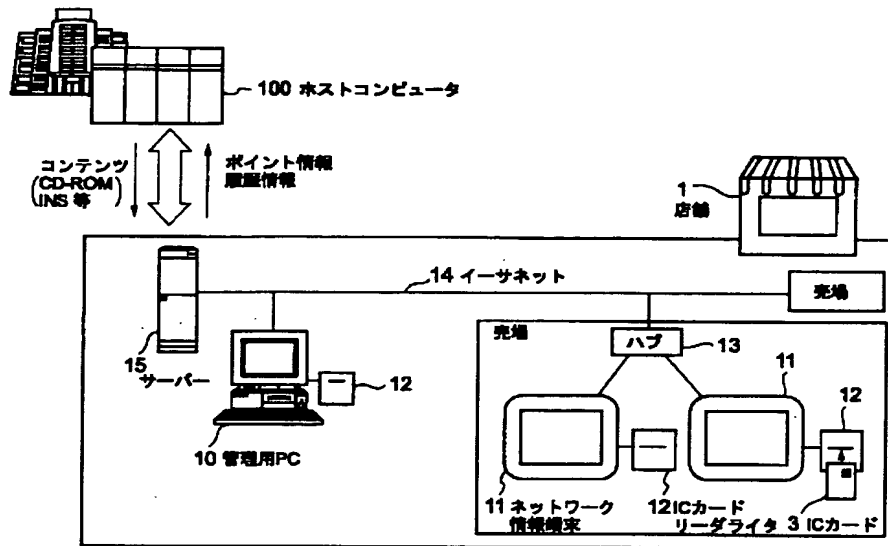
【符号の説明】

- 1 店舗
- 3 I Cカード (会員カード)
- 10 管理用PC
- 11 ネットワーク情報端末
- 11d ネットワーク情報端末表示画面
- 12 I Cカードリーダライタ
- 13 ハブ
- 14 イーサネット
- 15 サーバ
- 100 ホストコンピュータ

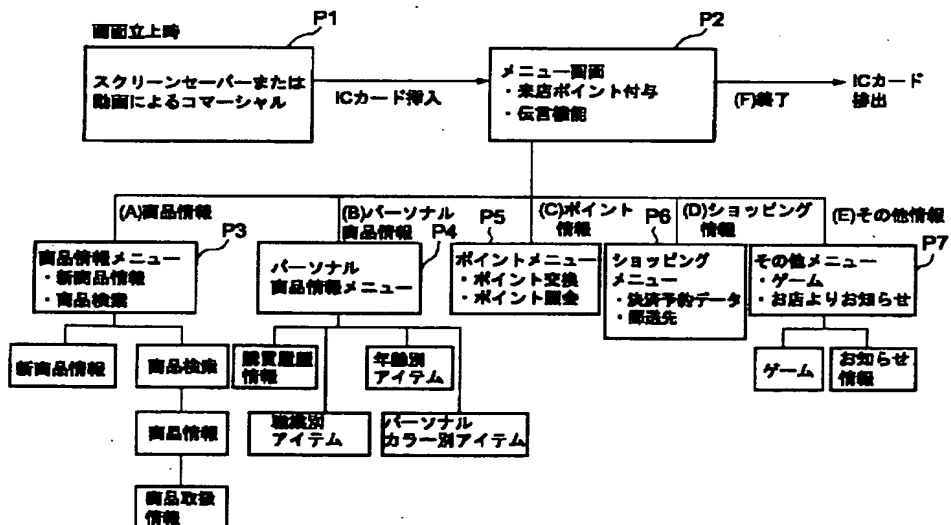
【図1】



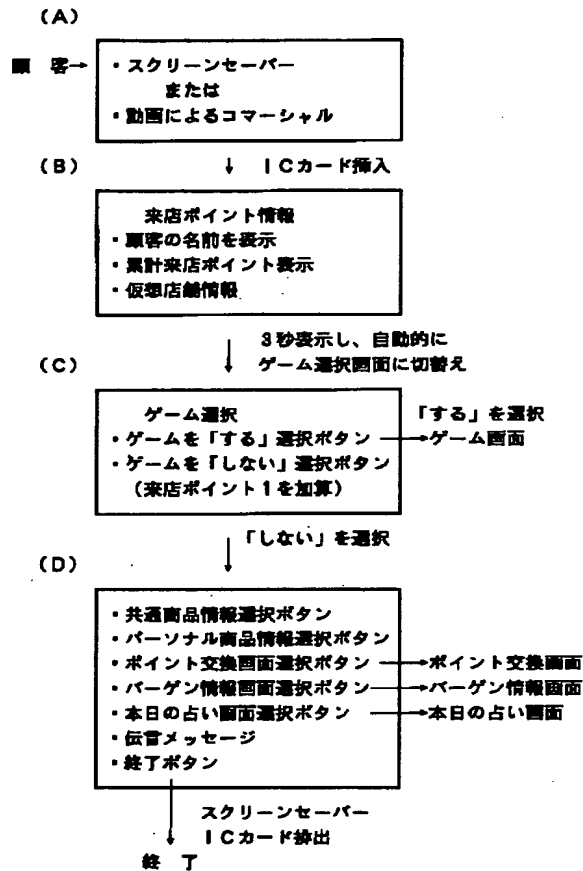
【図2】



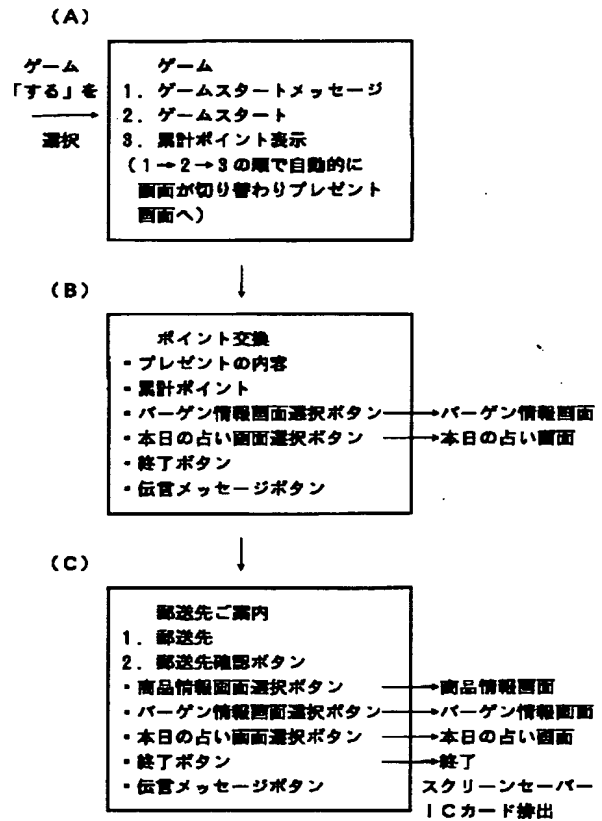
【図3】



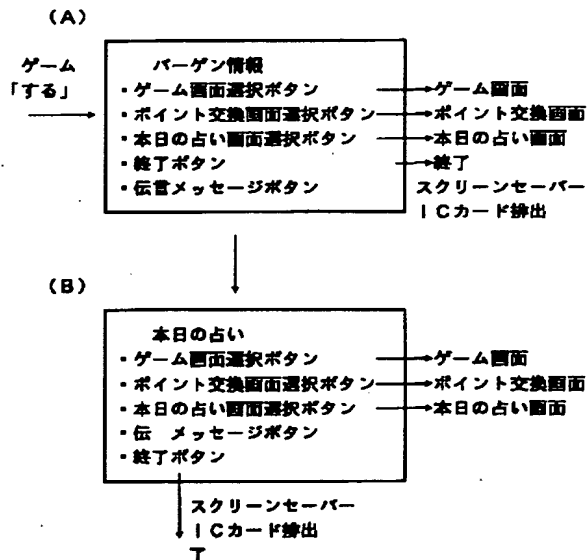
【図4】



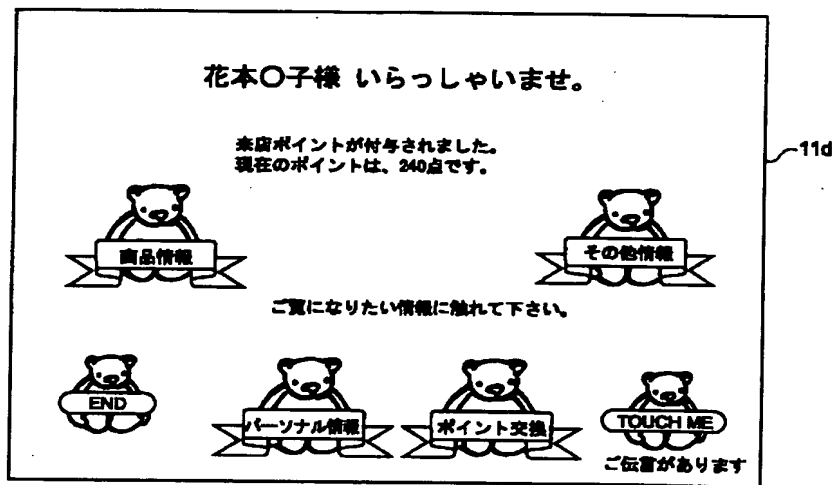
【図5】



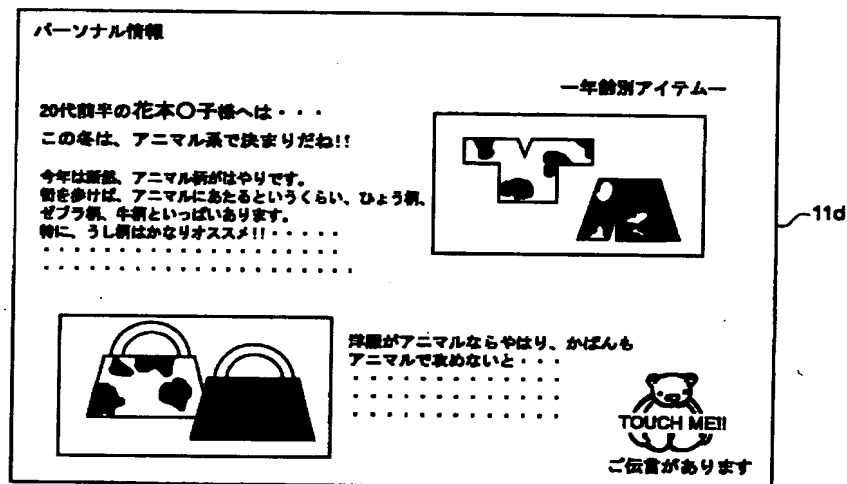
【図6】



【図7】



【図8】



フロントページの続き

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 EE05 EE07 EE21 FF03 FF08
 GG01 GG02
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